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C A S E

OF

Destruction of the Body of the Lower Jaw,

AND

AND

EXTENSIVE DISFIGURATION OF THE FACE,

FROM A

SHELL WOUND.

REPARATIVE AUTOPLASTIC OPERATION

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VAN BENTHUYSEN'S STEAM PRINTING HOUSE.
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CASE OF DESTRUCTION OF THE BODY OF THE LOWER JAW.

Wm. Simmons, aged 20 years, private in Co. L, N. Y. Heavy Artillery, admitted into New York Hospital October 26, 1865.

Patient was struck with a fragment of shell on the right side of the face, on the 25th March last, in front of Petersburg. The wounded parts have now been completely cicatrized for more than two months. The extensive disfigurement of the face which has resulted, is as follows:

The chin, owing to the absence of the body of the lower jaw, has receded and lost its prominence. On the right side of the face, a cicatrix extends from the middle of the zygoma to the angle of the mouth, at which latter point it is deeply depressed and closely adherent to the alveolar margin of the upper jaw, from which the teeth have been carried away.

This adhesion has drawn up the upper lip, and lengthened it considerably towards the right side. The lower lip having been detached by a laceration vertically at the right angle of the mouth, and also horizontally by another laceration crossing the upper part of the chin, nearly an inch below its vermillion border, has dropped below its proper level, and become adherent, leaving a space between the lips, at the angle of the mouth, of a finger's breadth, which exposes the end of the tongue to view and permits a constant escape of saliva. Irregular cicatricial lines cross each other below the left angle of the mouth, one of which extends upon the left cheek nearly to its middle.

All that remains of the lower jaw is the upper half of the ramus on the right side, and the entire ramus, with the angle supporting two molar teeth, on the left side.

From the point where the right angle of the mouth adheres to the upper jaw, a callous, thick border of skin stretches across the chin and terminates at the left angle of the jaw, to which it firmly adheres. This is evidently the lacerated edge from which the lower lip was torn by the original injury. It now performs the important office of a substitute for the lower jaw, affording support to the tongue, the attachments of which can be felt connected with its posterior surface.

The last upper molar tooth on the right side remains in situ, all the upper teeth between it and the left canine are gone; those beyond the canine, on the left side, remain. The finger introduced into the mouth perceives that the body of the tongue on the right side is bound to the adjacent parts by adhesions, and its motion of protrusion thereby limited.

Mastication being impracticable, patient is restricted to the use of soft solids and liquids. Deglutition is unimpaired. Articulation is very defective, owing to the confinement of the tongue by the adhesions just noticed. In consequence of this defect, patient is very averse to using his

voice, and prefers making himself understood by signs and the use of a pencil and paper.

His health is good, his complexion florid, and general appearance robust.

Fig. 1, taken from a photograph, shows patient's condition as just described.

OPERATION.

November 7, at 2 P. M., after the administration of ether, the following operation was performed: The lower lip was detached in its entire thickness by a horizontal incision, extending along the cicatricial line crossing the chin to a point below the left angle of the mouth. Its vermilion border, which had assumed a fan-like shape by cicatrization, could now be straightened out and applied to the upper lip throughout its entire length. To form a new angle for the mouth, a point was chosen at the margin of the upper lip equidistant from the median line with the left angle, and at this point the border was pared away obliquely. A corresponding point was chosen on the lower lip, and pared in the same manner. The two fresh cut borders were brought into accurate apposition and secured by sutures. The adherent right extremity of the upper lip was dissected up from the alveolar border of the jaw, and from this point an incision was carried outward and upward along the upper margin of the cicatrix, crossing the cheek as high as the zygoma. The skin and subjacent tissue were detached freely toward the orbit and temple.

Another incision was then commenced below the left angle of the mouth, at a point where the incision detaching the under lip terminated, and carried to the right, across the chin, at a finger's breadth below the free callous border above described, as constituting a substitute for the lost jaw. This incision was continued on obliquely upward and outward over the cheek, below and close to the cicatrix, as far as the zygoma.

A third incision, beginning at the starting point of the preceding one below the left angle of the mouth, was carried perpendicularly downward, a distance of two inches upon the neck. In its course a flat shaped cyst, of the size of a dollar, was encountered, filled with a brownish transparent viscid fluid, such as is met with in ranula. The cyst was dissected out entire. The angle included between these two incisions, as well as the integument below the incision crossing the right cheek, were extensively detached from the parts beneath.

An upper and lower flap, including the entire right cheek and nearly the whole of the chin were thus formed, separated, however, by the cicatrix crossing the cheek, which had been left in situ. After paring off the surface of this cicatrix, the edges of the flaps were brought together so as to cover it up, and secured by sutures. At the right angle of the newly constructed mouth, the flaps above and below were matched to the lips and also secured by sutures. Sutures were introduced in close proximity throughout the entire extent of the flaps, so as to maintain their edges in accurate adjustment.

Four of the sutures were twisted sutures, and were inserted, one at the new angle of the mouth, two upon the right cheek, at points where they would afford the best support to the flaps, and one at the angle of the flaps









below the under lip. The mouth thus reconstructed was of medium dimensions, the lips maintaining themselves in contact and retaining the salivary secretion.

The adjustment of the different parts to each other was effected without any strain upon the sutures at any point. No adhesive plaster was used. Liquid nourishment was directed to be given through a tube, and water dressings to be applied to the face.

November 8.—Progress favorable; swelling of the parts not excessive; a moderate degree of reaction has taken place; removed the yarn from the pins, and allowed the subjacent compressed surface to recover itself before reapplying fresh yarn; also removed some of the alternate thread sutures.

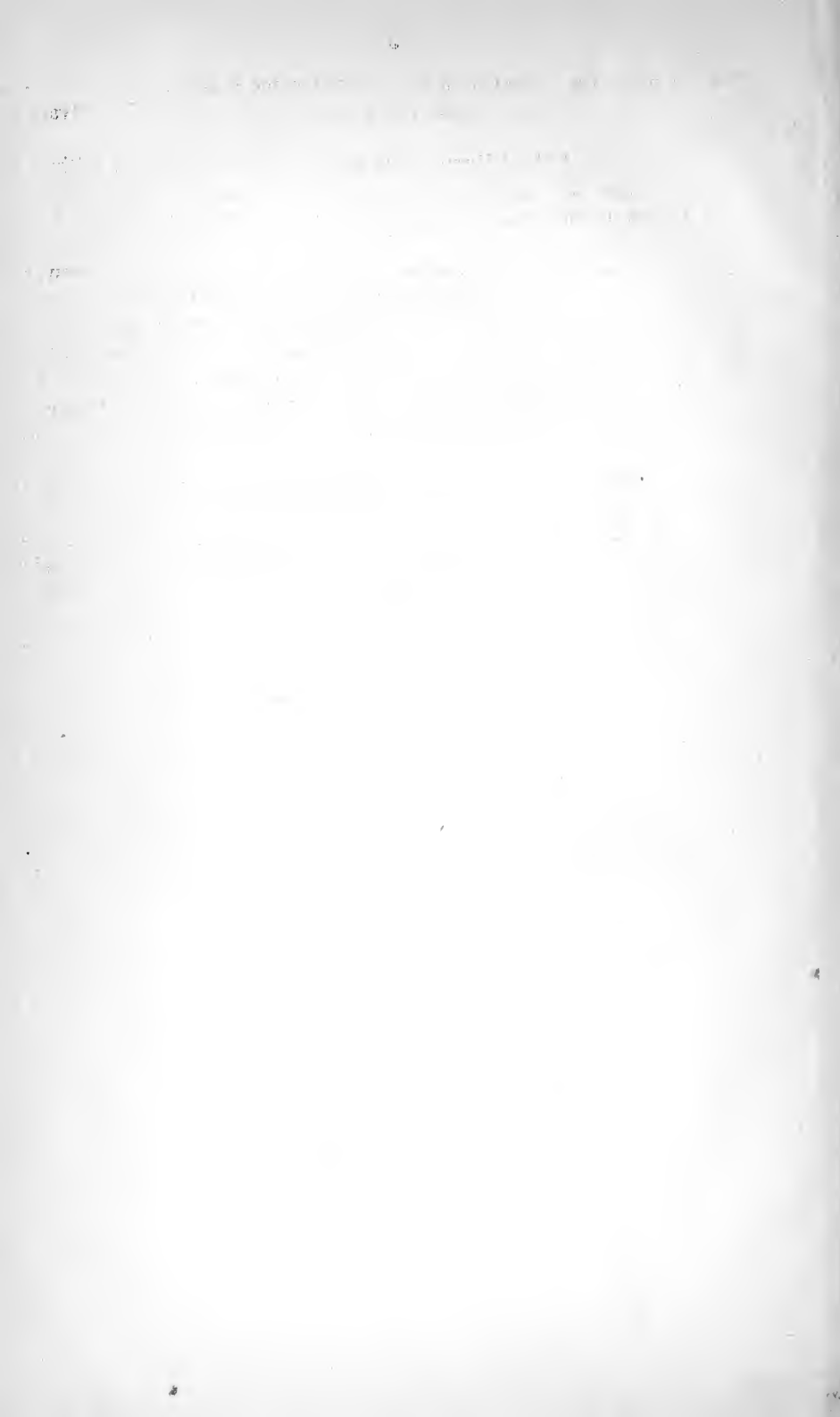
November 9.—Doing well; changed the yarn of the twisted sutures, in doing which the pin escaped on the chin and was not replaced; removed additional thread sutures at points where their support could be dispensed with.

November 10.—Adhesion has taken place throughout almost the entire extent of the flaps; removed all the remaining pin sutures and most of the thread sutures. A free discharge of pus is taking place at the lower extremity of the incision under the chin, where the cyst was removed; applied strips of adhesive plaster at points where their support seemed needed. A superficial slough, of the size of a copper cent, has formed over the zygoma, but cannot possibly mar the result of the operation. The supuration below the chin gradually diminished, and in a few days ceased. Every part of the wound healed completely. Patient left the hospital to return home on the 12th of December.

His appearance at that time may be judged of by the accompanying fig 2, taken from a photographic drawing.

Some improvement in the general appearance and expression of his face, as well as in articulation, besides his being able to maintain his lips in contact and thus prevent the escape of the saliva, were the important results achieved by this successful operation, equally gratifying to the patient and satisfactory to the surgeon.

In May, 1866, patient revisited the hospital and gave us an opportunity of ascertaining that a still further improvement had taken place in his condition, especially in the use of his voice. His articulation had become much more distinct; he had discarded the use of pencil and paper, and no longer showed any reluctance to engage in conversation.









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